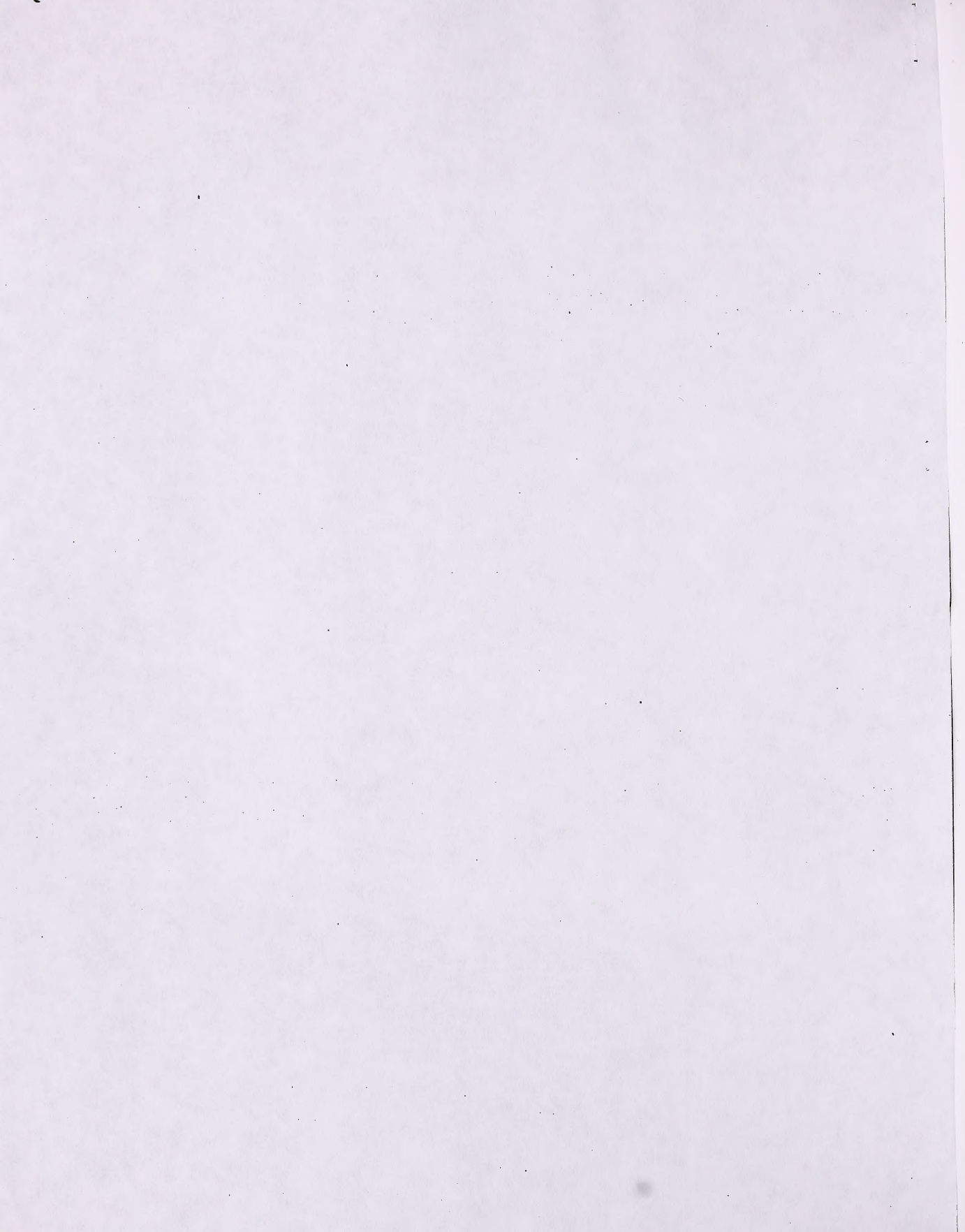


ALBERTA DISTANCE LEARNING INVENTORY

Summary Report

Executive Summary	4
Introduction	4
Survey Data	4
Local and Type of Distance Education Activity	5
(A) Overview of Distance Education Activities	6
(B) Post-Secondary Sector Highlights	6
(C) Private Sector Agencies Highlights	9
(D) Collaboration & Sponsorship	10
(E) Resources for Distance Learning	11
(F) Support Services	11
Delivery Modes and Innovative Applications of Technology	12
(1) Principal Modes of Delivery	12
(2) Innovative Use of Technology	13
Development Initiatives	14
Strengths and Limitations of Distance Education in Alberta	15
Conclusion	16
Appendix	17
Appendix A - Survey Institutions	18
Appendix B - List of Survey Respondents	18
Appendix C - Listing of Distance Education Programs and Courses	18
Appendix D - Enrollment Data - 1991-92	18
Appendix E - Collaborative Agreements	18
Appendix F - Principal Modes of Delivery	18
Appendix G - Distance Learning Development Initiatives	18

Alberta Advanced Education and Career Development
Program Services Branch
Edmonton, Alberta
March 28, 1994



Index

A.	Executive Summary	1
B.	Introduction	4
C.	Survey Distribution and Response	4
D.	Level and Type of Distance Education Activity	5
	(1) Overview of Distance Education Activities	5
	(2) Post-Secondary Sector Highlights	6
	(3) Private Sector Agencies Highlights	9
	(4) Collaboration & Sponsorship	10
	(5) Resources for Distance Learning	11
	(6) Support Services	11
E.	Delivery Modes and Innovative Applications of Technology .	12
	(1) Principle Modes of Delivery	12
	(2) Innovative Use of Technology	13
F.	Development Initiatives	14
G.	Strengths and Limitations of Distance Education in Alberta ..	15
H.	Conclusion	16
I.	Appendices	17
	Appendix A - Survey Instrument	18
	Appendix B - List of Survey Respondents	28
	Appendix C - Listing of Distance Education Programs and Courses	30
	Appendix D - Enrolment Data - 1991-92	41
	Appendix E - Collaborative Agreements	44
	Appendix F - Principle Modes of Delivery	49
	Appendix G - Distance Learning Development Initiatives ...	52

ACKNOWLEDGEMENTS

This report was prepared by the Program Services Branch of Alberta Advanced Education and Career Development with the cooperation of the following agencies and post-secondary institutions whose support is most appreciated:

Alberta Agriculture
Alberta Vocational College Lesser Slave Lake
Athabasca University
Certified General Accountants' Association
Concordia College
Fairview College
Grant MacEwan Community College
Lakeland College
Lethbridge Community College
Northern Alberta Institute of Technology (NAIT)
Olds College
Petroleum Industry Training Service
Rural Education Development Association
Southern Alberta Institute of Technology (SAIT)
St. Stephen's College
The University of Alberta
University of Calgary
Wetaskiwin General Hospital

A. Executive Summary

At a meeting in Vancouver in July, 1992 the Western Ministers of Education and Advanced Education discussed strategies to strengthen initiatives in education within their jurisdictions. Post-secondary distance learning was identified as an area for collaborative study. Information gathered would provide an overview of the scope and scale of provincial distance education activities, provide information to improve the current system and highlight areas in which collaborative efforts currently exist. This summary of Alberta's post-secondary distance learning activities, strengths and limitations, will be condensed for inclusion in the western distance learning report.

For the purpose of this study, distance learning has the following characteristics:

- *It is a structured learning activity in which the instructor and students are separated by time and/or space;*
- *It involves two-way communication through print materials and/or one or more technical media; and*
- *It includes delivery between/among different campuses of an institution, but not courses in which the students and instructor are both on the same campus, as this would include all forms of individualized instruction.*

The level and type of distance education activity varies among post-secondary providers. Distance learning opportunities range from complete Masters programs to single course offerings. Approximately 75 to 80% of the institutions surveyed offer one complete program or more through distance delivery. Programs include both credit and non-credit courses. Students may proceed through courses in a self-paced or instructor-paced format with approximately 45% to 50% of the institutions surveyed using the self-paced format.

Courses utilizing technologies for delivery are often limited to specific sites. The distribution of distance education students and delivery sites varies among institutions, with approximately 70% of students taking instructor-paced courses residing in Alberta. Institutional delivery sites range from 2 to 115 with the average number of sites being 26. Student registrations per site/per course ranges from 2 to 30.

The institutions and agencies surveyed provide a variety of student support services which may include access to library services, tutorial assistance, counselling, local

teleconferencing assistance or test/grading support. The type and level of support service varies with each provider and course or program.

In Alberta print is cited as the most common form of program delivery, followed by audio teleconferencing. High quality print packages provide a foundation for many course manuals and student guides. Approximately 60% of Alberta institutions and private sector agencies use a multi-mode approach for course delivery. This may include a combination of print-based materials, audio or video resources, teleconferencing, videoconferencing, computer managed learning, computer-mediated communication, facsimile and face to face seminars.

Survey respondents support the need to coordinate communication technologies among providers and to continue to be leaders in the development and piloting of distance education technology applications.

The most recent technological applications incorporated into the delivery of distance learning are computer mediated communication (CMC) and videoconferencing. CMC is being used by Athabasca University and the University of Calgary (U of C).

Videoconferencing is being used for distance learning by the U of C and the University of Alberta faculties of Engineering and Nursing and has been piloted by the Faculty of Education. These faculties have plans to continue this application in the future.

Grant MacEwan Community College has been active in piloting computer managed learning (CML) and audiographics in the province. A satellite dish at the new City Centre campus will make videoconferencing possible.

Data on operating costs for distance education was not provided by all respondents as the operating costs for development and delivery of distance learning activities are integrated into the budgets of traditional departments, faculties or continuing education units. Budgets reported ranged from \$58,000 to \$350,000.

Collaboration and cooperation among the post-secondary sector and other learning agencies is a strength of distance learning in Alberta. A variety of collaborative agreements exists between universities, colleges, and technical institutes in Alberta and between other jurisdictions. Cooperation is most common for course development, joint delivery, and transfer of credits. Survey data lends support for continued and expanded collaboration and cohesive planning among the providers of post-secondary distance education.

Although a degree of collaboration currently exists, the Department of Advanced Education and Career Development should consider playing a facilitator role in bringing interested parties together to discuss mutual issues such as sharing the cost of technology and program development, standardized use of telecommunications systems, and the quality of distance learning courses. These proposed steps would enhance communication and joint projects plus reduce duplication among distance learning providers in Alberta.

Overall, the diversity of distance education activity and the experience of Alberta's post-secondary sector provides a sound base for continued development and delivery. The information provided for this report suggests that issues such as the funding and costs associated with development and delivery, and compatible and affordable telecommunications technology require attention from a cooperative group of providers responsible for distance learning initiatives in Alberta.

B. Introduction

In July, 1992 the Ministers of Education and Advanced Education from British Columbia, Alberta, Saskatchewan, Manitoba, the Yukon and Northwest Territories met to share information on major education and training initiatives in their western jurisdictions.

Five areas for collaborative study were identified, with a province to lead each area. In the area of Distance Education, the Ministers recommended there should be an inventory of the distance learning initiatives in Western Canada. Alberta was designated as the lead province to compile an inventory of the distance education initiatives of the western provinces and two territories.

Information on distance learning activities was gathered from a selection of post-secondary institutions, several private sector distance education providers and one government department. The survey gathered descriptive information on distance learning activities and statistical data.

The survey was limited by the inability to determine all the private sector deliverers of distance education. Therefore, a portion of the report is based on information obtained from a small selection of private agencies and one government department.

The following report provides an overview of distance education in Alberta. Included in the report are a listing of current course and program offerings, collaborative agreements which are currently in place, principle modes of delivery and the strengths and limitations of distance education in Alberta. This information will be condensed for inclusion in the western post-secondary distance learning inventory.

C. Survey Distribution and Response

In April, 1993 a Distance Learning Inventory Survey was distributed to post-secondary institutions, a selection of private sector agencies and one government department. The Learning at Home: Distance Education Courses in Alberta, Saskatchewan and Manitoba directory was used to select distance learning providers. This publication was produced by Information Development and Marketing Branch of Alberta Advanced Education and Career Development. Information was gathered utilizing a survey instrument (see Appendix A). Input into the survey design was received from representatives of several post-secondary institutions.

Each institution was asked to provide information pertaining to the type of courses and programs offered including method of course delivery. This data was updated utilizing information contained in the Learning at Home directory.

The survey also requested information on future initiatives, sponsorship and collaboration with other agencies, courseware development, support services, enrolment data, operating budget and the strengths and weaknesses of post-secondary distance education in Alberta.

The survey was sent to 15 post-secondary institutions, 6 private sector agencies and one government department. Between May and July, 1993 responses were received from 10 colleges and institutes, 3 universities, 4 private sector agencies and one government department (see Appendix B).

The data cited in this report is based on the most accurate or available data as provided by the respondents. Statistical data is based on 1991 - 92 figures unless noted otherwise. Often the information requested of the institutions was not available, not applicable or incomplete. Quantitative data was frequently provided using different standards or was reported for different years. Recognizing these limitations, this report provides an overview of distance education in Alberta and highlights specific initiatives.

D. Level and Type of Distance Education Activity

(1) Overview of Distance Education Activities

The level and type of distance education activity varies among post-secondary providers in Alberta. Current course and program offerings represent a diverse range of levels and content areas. Approximately 75 to 80% of the institutions surveyed offer one complete program or more through distance delivery. Programs include credit and non-credit certificates, undergraduate and graduate degrees. For a complete listing of current programs and courses refer to Appendix C.

The self-paced or open entry/exit is the primary delivery format for approximately 45% to 50% of institutions surveyed. The instructor-paced or fixed entry/exit format follows a set schedule and this approach is used by 20% of the institutions. Another 20% of respondents provide courses or programs through either delivery format.

Although many courses and programs are self-paced, most have time limits for completion. These time limits may be set by specific programs or resemble on-campus courses.

Fifty percent of program deliverers offer courses that are limited to specific sites. Technology such as teleconferencing or videoconferencing is the main mode of course delivery. The number of delivery sites varies with each institution, with a range of 2 for the Northern Alberta Institute of Technology (NAIT), and Concordia College, to 115 locations for the Southern Alberta Institute of Technology (SAIT). The average number of sites used is 26. The maximum number of sites used simultaneously ranges from 2 for NAIT and the Certified General Accountants' Association (CGAA) to 15 for U of A, and U of C. Student registrations per site/per course ranges from 2 to 30.

Distribution sites are concentrated regionally and provincially for courses available at fixed locations. Several institutions deliver to sites in Saskatchewan, Manitoba, British Columbia and the Northwest Territories.

Approximately 70% of students taking courses not limited to specific sites reside in Alberta. The distribution of these students varies with the location of the institution and with each program.

(2) *Post-Secondary Sector Highlights*

Appendix C provides a listing of current program and course offerings. This list is provided as a guideline. For more comprehensive information please contact the specific institution. Highlights for several institutions are provided in this report. Appendix D provides course or program registration details for 1991-92.

Universities

Athabasca University (AU), Canada's Open University, is located in Athabasca, Alberta. It is dedicated to increasing equality of educational opportunity for all adult Canadians. Athabasca University offers six complete undergraduate degree programs, nine university certificates, and in the fall of 1994 will offer a Master's degree in Distance Education and a Master's degree in Business Administration.

Student and library support for AU students is provided at learning centres located in Edmonton, Calgary and Fort McMurray. Students enrolled in AU courses can place collect calls for telephone tutoring. The main mode of delivery is the home-study print package, however this learning system also may include a combination of audio, video and computer disks, as well as some face to face instruction.

AU had 8,295 registrations in September, 1992 with 11,255 students completing courses in 1991-92. AU students are distributed across the country and elsewhere, however approximately 75% of learners are Alberta residents.

The U of A, through the initiatives of several faculties, has developed and delivered both credit and continuing professional education courses at a distance. The most common modes of delivery have been teleconferencing and print-based home study. The Faculty of Extension has experience in these methods of delivery and videoconferencing. The Special Sessions division of the Faculty of Extension has incorporated teleconferencing into the delivery of several off-campus courses. The Faculty of Nursing has offered a baccalaureate in Nursing by distance delivery for a number of years

The U of A Faculty of Nursing has utilized the videoconference facilities of Alberta Transportation and Utilities to deliver graduate courses to Red Deer. In the fall of 1992, AGT videoconference facilities were used jointly by the Faculties of Engineering at U of A and the University of Calgary to pilot the delivery of a graduate course in Transportation Engineering.

The Instructional Technology Centre in the Faculty of Education at U of A provides support for audio and audiographic teleconferencing for the campus.

At the U of A the maximum number of sites used simultaneously to deliver teleconference courses ranges between 1 and 15, with registrations ranging from 3 to 30 per site. Sites are concentrated in Alberta, although specific Faculty of Education courses are delivered to sites outside the province. The majority of distance learning activities at the U of A have a fixed entry point, with time limits set for completion. Distance learning registration data was not available at the time of this inventory.

The U of C offers a wide range of undergraduate, graduate and continuing education courses. Teleconferencing is used to deliver to 70 locations in Alberta, with an average of 15 sites used simultaneously. On average there were 20 students participating at each site. Sites are distributed throughout the province, although nursing seminars are delivered to sites in British Columbia, Saskatchewan and Manitoba. In 1991-92 there were 1,013 students registered in courses delivered at a distance.

Technical Institutes

SAIT is active in the delivery of distance education through print-based and teleconferencing activities. Programs and courses focus on technical education for adults seeking to gain new knowledge or skills in a variety of areas (see Appendix C).

NAIT also delivers a variety of technical courses and programs. The principle mode of delivery of NAIT distance learning activities is correspondence (see Appendix C).

Both technical institutes offer complete programs of study through distance education. Fixed entry/exit and open entry/exit courses and programs are available. SAIT can deliver to 112 provincial locations and three sites in Saskatchewan and the North West Territories. The average registration per site/per course is 3. Total registrations for fixed location courses was 3,162. NAIT delivered to 2 fixed sites with an average of 30 registrations per site/per course, for a total of 120.

In 1991-92 NAIT had 150 registrations in self-paced courses and had 300 course completions. SAIT had 3,956 new registrations. The majority of distance learners registered in SAIT and NAIT courses are concentrated in Alberta. SAIT has a higher percentage of students from central and southern Alberta, while approximately 30% of NAIT's students are from rural northern Alberta and 70% from urban areas.

Community Colleges

The five community colleges included in this inventory use various distance education approaches to deliver certificate, diploma, and academic upgrading programs and courses. The majority of the colleges reported using a mixed mode of course delivery, with print being the most common medium, followed by teleconferencing.

Print-based courses are commonly supported by video or audio resources. Grant MacEwan Community College (GMCC) uses a combination of technologies for distance courses, including computer managed learning (CML). Fairview and Lethbridge Community College have also utilized CML in distance learning.

GMCC has six complete programs available and the number of courses in each program is provided in brackets: Correctional Services (5), Gerontological Nursing (9), International Business (14), Nurse Credentialling (10), Occupational Health (12), Voluntary Sector Management (17). The other colleges offer at least one program by distance learning.

A high proportion of the college courses and programs are open entry/exit, although several institutions set guidelines for course completion. The total open entry registrations in 1991-92 for GMCC programs was 263 with 322 completions. Lakeland College had 610 new course registrations. Lethbridge Community College had approximately 1,033 new course registrations and 560 completions, with approximately 700 active students at any point in the year. Olds College had 338 new course registrations.

Alberta Vocational College Lesser Slave Lake (AVC LSL) offers a wide range of academic upgrading courses and Cree Language courses using various technologies and modes of delivery. The majority of courses are on a fixed schedule and in 1992-93 courses were delivered to 23 regionally located sites. AVC LSL had 110 registrations in self-paced courses and 440 in instructor-paced courses in 1992-93

All institutions surveyed had student dropout rates which varied with the specific course and program.

(3) Private Sector Agencies Highlights

Four private sector agencies and one government department responded to the survey inventory. Appendix C provides a listing of agencies and courses/programs offered.

Alberta Agriculture is a government department active in the delivery of agricultural non-credit home study courses. The main mode of delivery is print, supported by video resources or computer software. Learners are distributed in rural areas throughout Alberta, with a smaller percentage from urban locations. A total of 2,066 learners registered in Alberta Agriculture courses in 1991-92. Due to the informal nature of programs, student completion records are not kept.

The Rural Education and Development Association (REDA) works with Alberta Agriculture to deliver courses and collect revenue from the sale of courses. Registrations in REDA courses in 1991-92 was 169.

The Certified General Accountants' Association (CGAA) offers a professional accounting designation program, which includes 22 courses. A combination of print, CML and optional lectures are utilized to deliver courses. In 1991-92 there were 1,288 registrations in program courses, with 115 graduates. Students must complete the program within 10 years.

(4) Collaboration and Sponsorship

Collaboration among the post-secondary sector and other learning agencies is a strength of distance learning in Alberta. A variety of collaborative agreements exist between universities, colleges, and technical institutes in Alberta and between other jurisdictions. Cooperation exists most commonly for course development, joint delivery, and transfer of credits. Agencies also work together to provide student support, marketing, registration or training. Several examples of collaborative agreements are noted. Appendix E provides a comprehensive listing of agreements reported by survey respondents and the nature of the collaboration.

AU has joint delivery agreements with several colleges in Alberta, Arctic College, Northwest Territories and North Island College in British Columbia. Credit transfer agreements exist between AU and select diploma programs.

AU has implemented a collaborative library service to support learners in northern Alberta. NORALINK is an agreement among northern libraries which pools resources, to serve each other's clients and provide on-line access to each other's collections. The founding members of the agreement include AU, college libraries at Keyano, Grand Prairie, and Lakeland and AVC Lesser Slave Lake and AVC Lac La Biche. The Northern Lights Regional Library and Peace Library System are also included in the agreement. The NORALINK group has an office on The University of Alberta campus to provide reference and teaching services for clients requiring the use of the U of A library collection. Faculty from the NORALINK group also have inter library loan requests filled by this office. (For more information contact AU librarian, Leslie Aitken, 675 - 6262).

PERCC, the Power Engineering and Related Courses Cooperative exists to share course development and give transfer of credits. This cooperative includes 7 colleges that teach Power Engineering courses. (For more information contact Fairview College).

GMCC has developed a variety of collaborative agreements with other agencies and institutions. Nursing credentialling courses are brokered to other colleges and hospitals in Alberta and in other jurisdictions. During the last year, GMCC worked with Camosun College in Victoria and the Commonwealth of Learning in Vancouver to develop a suitable computer tracking system for distance open entry/exit or self-paced courses.

A Certificate in Adult and Continuing Education (CACE) is offered jointly by the CACE consortium which includes the Universities of Alberta, Calgary, Saskatchewan, Victoria and Manitoba. Credit transfer agreements exist with the Faculty of

Education at U of A and the CACE program. An agreement for credit transfer is pending with several other agencies.

The U of A and the U of C work cooperatively to deliver Education and Engineering courses, and have credit transfer arrangements.

In addition to collaborative agreements between institutions, external funding or sponsorship is provided for course development, delivery or instruction. External sponsorship is most commonly obtained for the funding of course development or delivery. Sponsorship is provided by corporations, school authorities or other provincial or federal government departments.

(5) Resources for Distance Learning

Alberta Advanced Education and Career Development provides funding to post-secondary institutions in Alberta which determine the level of funding they provide to distance education initiatives. Many courses/programs are operated on a partial or full cost recovery basis or receive funding from external sources. Several respondents indicated courses delivered to jurisdictions outside Alberta operate on a cost recovery basis.

Several respondents were not able to provide data on operating expenditures for distance learning. The operating costs for development and delivery of distance learning activities are integrated into the budgets of traditional departments, faculties or continuing education units.

GMCC has a central unit to provide course development and delivery support. This unit had an operating budget of \$220,000 in 1991/92. The Faculty of Education at the U of A has an Instructional Technology Centre that supports the teleconference activities of other faculties. The total budget for teleconferencing in 1991/92 was \$28,000. Other institutions reported operating budgets for distance learning ranging from \$58,000 for Lethbridge Community College to \$350,000 for NAIT.

(6) Support Services

All institutions and agencies offer a variety of student support services which may include access to library services, tutorial assistance, counselling, local teleconferencing assistants or test/grading support. However, the breadth and depth of these services varies with each provider and course or program.

All institutions provide tutoring as an integral part of services available to learners. The majority of tutoring is initiated by the student during designated times.

Telephone contact is the most common medium used for tutoring. This mode is inexpensive and flexible, and uses existing technology. Several institutions allow students to make collect calls to tutors or provide access to a toll-free service. Some institutions use the teleconference link or computer conferencing to provide instructional support.

AVC LSL uses the FAX for tutoring and submitting library requests. In the coming year it will be introducing a student networking system using computer conferencing and telewriter seminars. Fairview College has been innovative in the use of the FAX machine for tutoring and submitting course lessons.

Counselling services are provided at the learner's request over the telephone or on campus. AVC LSL will introduce distance counselling this year. AU provides counselling at their local learning centres.

Library support services are available through local libraries or campus learning centres. Several institutions, including AU, GMCC, U of C, and U of A enable varying degrees of access to on-line computer catalogues. AUCAT, the Athabasca University on-line catalogue can be accessed in Athabasca, or learning centres in Calgary, Edmonton, and Fort McMurray. Most commonly, library requests are received via telephone or FAX, and materials are mailed out to students. Several agencies indicated that library access is limited to on-campus use or is available by request only.

Institutions that deliver courses via audio teleconferencing or audiographics provide local teleconference assistants. Arrangements for assistants are made locally by the Further Education Councils, Consortia, hospitals or collaborating institutions.

E. Delivery Modes and Innovative Applications of Technology

(1) *Principle Modes of Delivery*

Print-based is the most common form of program delivery, followed by audio teleconferencing. High quality print provides a foundation for many course manuals and student guides for home study courses and programs. Print courses are often supported by video, audio, CML software, teleconferencing or audiographics. Approximately 60% of Alberta institutions and private sector agencies use a multi media approach for course delivery. This may include a combination of print-based materials, audio or video resources, teleconferencing, videoconferencing, computer managed learning, computer-mediated communication, facsimile and face to face

seminars. Refer to Appendix E for a complete listing of principle modes of delivery used by distance learning providers.

The majority of the print courseware used by institutions is developed in-house, with some agencies purchasing student guides or manuals from other agencies or private vendors. Computer software such as CAI, CML and testbanks and video and audio resources are more commonly purchased from various external vendors.

AU is currently developing Quality Assessment Techniques to evaluate both in-house and external courseware.

(2) Innovative Use of Technology

Various innovative applications of technology were reported by survey respondents. The most recent technological applications incorporated into the delivery of distance learning are computer mediated communication (CMC) and videoconferencing.

Computer-mediated communication (computer conferencing) allows for rapid communication among students as well as between student and instructor. Computer-mediated communication refers to the use of a network of microcomputers linked to a host computer by a variety of means including local networks, telephone lines, or special data networks. Computer-mediated communication includes both electronic mail programs and computer conferencing programs. This technology is being used by AU and the U of C.

Videoconferencing interactive technology enables the use of two way audio and video. This point to point communication technology has been used successfully by The U of A faculties of Engineering and Nursing and has been piloted by the Faculty of Education. These faculties have plans to continue these applications in the future.

AVC LSL has used the telewriter for one on one tutoring and group learning.

Fairview College has combined the use of computer managed learning with the tutor/fax for Power Engineering and Building Operators courses.

GMCC has been active in piloting CML and audiographics in the province. A satellite dish at the new City Centre campus will make videoconferencing possible.

The U of C and U of A are collaborating to deliver graduate engineering courses via videoconference. U of C is also incorporating the telewriter into a multi-media system.

F. Development Initiatives

Survey respondents were requested to identify distance education courses/programs either planned or under development over the next 2 years. Data was provided on the number of courses and the proposed mode of delivery if available. Initiatives range from the development of single print-based courses to Master's degrees delivered via computer-mediated communication and teleconferencing. Appendix G provides a comprehensive listing of future initiatives as identified by survey respondents. Highlights are provided below for several agencies:

AU is developing a Master's program in Distance Education that will be delivered through a combination of print and computer-mediated communication. A Master of Business Administration program is also being developed in co-operation with Henley Management College in the United Kingdom. Both programs will be available in the fall of 1994.

AU is currently implementing instructor free learning groups which enable students to meet without an instructor and manage the learning and interaction themselves.

NAIT has an extensive list of print-based health and medical science courses either planned or under development. SAIT has an Auto CAD (Computer Assisted Design) certificate program and Construction Management certificate program being developed.

The Faculty of Education at the U of A has a variety of under graduate and graduate courses planned. The Faculty of Education has two innovative delivery modes planned for two undergraduate courses. They include EdSec 200 utilizing a Power Book computer and Fax modem, and the Phase 3 Practicum Videoconferencing project (Desktop videoconferencing). The Phase 3 Practicum uses an approach that assigns students from various courses, representing different subject areas, to single sites with one or two faculty consultants. This means that, while 45 students are being involved in this experimental approach, they represent students in 10 different Phase 3 courses. This project is being sponsored by Northern Telecom, Edmonton Telephones and Edmonton Public Schools.

The Faculty of Nursing at U of A has three graduate level courses planned for delivery to Red Deer via videoconferencing. The Faculty of Engineering will also use videoconferencing to deliver six undergraduate courses currently being developed.

The U of C Faculty of Education has two graduate programs planned for delivery by a combination of teleconferencing and telewriter. A Master's degree in Continuing Education incorporating teleconferencing and CMC is under development.

G. Strengths and Limitations of Distance Education in Alberta

Institutional respondents were asked to comment on the strengths and weaknesses of distance education in the public post-secondary sector in Alberta. The strengths and limitations ranked below provide a summary of the survey responses:

(1) Strengths

There currently is a wide array of individuals at post-secondary institutions province-wide developing and delivering distance education courses/programs. The use of various technologies has expanded the scope of traditional correspondence education. The newer technologies have the potential to extend the delivery of programs and provide for consultations among professionals. Respondents indicated that the main strengths of distance learning in the post-secondary sector are as follows in order of frequency:

- Collaboration and coordination of activities among institutions;
- Diversity of courses/programs and choices for learners;
- Increased access and flexibility for learners;
- Institutional expertise;
- Quality of design and instruction; and
- Student control of the learning process.

(2) Limitations

Although there is increasing interest and development of distance learning activities, challenges and limitations are evident. Many distance education specialists work in relative isolation and this can lead to duplication of efforts and limit opportunities for collaboration. Respondents indicated that the main issues facing post-secondary institutions involved in distance learning are as follows in order of frequency:

- Lack of coordination and leadership within the province;
- Funding and cost-benefit issues such as concern for funding for course development, cost-benefit for institutions and high costs of technologies to deliver courses;

- Lack of coordination or standardization of telecommunications system for course delivery and communication;
- Lack of centralized data source for sharing and collaboration; and
- Questionable quality of distance learning courses. Are they replicating the problems of the traditional classroom?

H. Conclusion

Based on the data received the following observations and assumptions can be made about what is working and what is not working well in distance education in Alberta.

What happens in many institutions often depends upon the skills and background of the existing staff, rather than on any specific institutional plan. As well, many philosophical differences exist among institutional staff, and their own pedagogical biases form the basis for the work that is done in distance education. The inventory by design, has not raised questions in a pointed way about some of these concerns.

What does this mean? A critical consideration is that an institutional perspective needs to be applied to the use of technology, to ensure that the learners' needs are being met and that technology is not being used for its own sake.

An effort must be made for Alberta Advanced Education and Career Development to keep this inventory of distance education activities current, to expand it to include other providers of distance education, and to ensure access to the information by interested parties.

Even though collaborative efforts currently exist, the Department should also consider playing a facilitator role in bringing interested parties together to discuss issues such as sharing the cost of technology and program development, standardized use of telecommunications systems, and the quality of distance learning courses.

These proposed steps would enhance communication and project development plus reduce duplication among distance learning providers in Alberta.

I. APPENDICES

Appendix A Survey Instrument

Office of the
Deputy Minister

Devonian Building East Wing
11180 Jasper Avenue
Edmonton, Alberta
Canada T5K 0L3

Telephone 403/427-5635
Fax 403/427-9430

April 16, 1993

Mr. Dan Vandermeulen
President
Alberta Vocational College
Lesser Slave Lake
Mission Street
Grouard, AB
T0G 1C0

Dear Mr. Vandermeulen:

Re: Distance Learning Inventory

At their meeting in Vancouver last July, the Ministers of Education and Advanced Education of the six western jurisdictions adopted a recommendation that there should be an inventory of distance learning initiatives in Western Canada. A copy of the complete text of the recommendation is attached for your information.

To this end, we would like the assistance of Alberta Vocational College-Lesser Slave Lake in completing the portion of the inventory related to Alberta's post-secondary system. As a first step, we have obtained the attached printout of the information your institution supplied for the publication, Learning at Home, produced by the Information Development and Marketing branch of Advanced Education and Career Development. Also included in this package is a two-part questionnaire which we are asking you to complete, to supplement the information which we already have. The first (descriptive) section of the questionnaire will enable us to include a qualitative summary of your activities in the inventory; this will be useful to institutions and agencies which are considering collaborative strategies for specific projects in the future. The statistical section will provide a picture of the scope and scale of your activities.

Mr. Vandermeulen

April 16, 1993

Page 2

If you are willing to assist, please designate a contact person by April 23, 1993 with whom further details can be discussed. The contact within the department for this project is Brent Pickard, Director, Program Services (phone 427-5589). If you have any questions about details, he will be able to assist you.

Sincerely,

Lynne Duncan
Deputy Minister

Alberta Advanced Education
and Career Development
Program Services
April 8, 1993

DISTANCE LEARNING INVENTORY

ALBERTA PUBLIC POST-SECONDARY INSTITUTIONS

Introduction

For the purpose of this inventory, distance learning has the following characteristics:

- *It is a structured learning activity in which the instructor and students are separated by time and/or space;*
- *It involves two-way communication through print materials and/or one or more technical media;*
- *It includes delivery between/among different campuses of an institution, but not courses in which the students and instructor are both on the same campus, as this would include all forms of individualized instruction.*

Individual courses which conform to this definition should be reported, even if other courses in the same program are delivered through traditional face-to-face instruction.

Please give the name, title, phone/fax numbers of the individual to whom enquiries should be sent, for possible publication in the inventory.

Name, title _____

Phone _____ Fax _____

SECTION ONE: DESCRIPTIVE INFORMATION

1. Please review the attached printout of distance-delivered courses and programs which was provided by your institution in response to a previous survey. Is the list complete? (If not, please note any additions or deletions on the blank form included with the printout.)
2. Are there any plans to add new courses or programs in the next one to two years? Please list them below.

Program [indicate whether planned(P) or under development (UD)]	# of new courses	delivery mode (print, teleconf., etc.)	target clientele

3. Are any of the courses or programs currently offered being sponsored or (fully or partially) funded by an external organization or agency, other than Alberta Advanced Education & Career Development? If so, please provide the information below.

Course/program	Sponsoring agency	Nature of involvement (please check)		
		funding	development	instructors

- 4a. What are the principal technologies used by your institution (e.g., print, teleconferencing, videotapes, computer conferencing, etc.)? Please indicate if combinations are used.

- 4b. Please identify any innovative applications of technology used by your institution (on or off campus).

5. What proportion of your courses are available only at fixed locations/on fixed schedules (e.g., through videoconferencing)?

6. Apart from textbooks, does your institution use (or plan to use) any courseware which is not developed in-house? If so, please provide a brief description:

Type of courseware	Used (yes/no)?	Source	Purchased, leased or shared?
study guides			
student manuals			
videotapes, discs			
audiographics slides			
CAI software			
CML software			
CML testbanks			
Other (specify)			

7. Does your institution have any collaborative agreements with other institutions or agencies, in Alberta or other jurisdictions (please specify) for a) courseware development, b) joint delivery, c) transfer of credits?

Agency	Nature of Collaboration

- 3 -

8. How do distant learners enter and proceed through your courses:
- a) open entry/exit, self-paced learning
 - b) fixed entry/exit, instructor-paced learning
 - c) other (specify) _____
9. What support services are available to the distant learner, and how are they provided (this includes, library services, tutorial assistance, counselling, local teleconferencing assistants testing/grading mediated through CML, etc.)?

Service	How provided

10. Looking beyond your institution, at distance learning offered through all the public post-secondary institutions in Alberta:

a) what are its strengths?

b) what are its weaknesses?

SECTION TWO: STATISTICAL DATA

(If possible, provide data for the 1991/92 academic year - presumed to start August 1 or September 1, 1991 and run to July 31 or August 31, 1992, respectively. If 1991/92 data are not yet available, please use the most recent year for which complete data are available.)

- 1a. For each of the fixed entry/exit, instructor-paced courses offered, give:

total enrolment _____
total number of sites _____
number of completing students _____
number of non-completing students _____

- 1b. For each of the open entry/exit, self-paced courses offered, give:

enrolment at beginning of the year _____
new enrolments during the year _____
completions during the year _____
enrolment at end of the year _____

Does your institution set time limits for the completion of these courses? If so, please include information on "active" students and "inactive" students (dropouts):

2. For complete programs offered at a distance, please give the numbers of students enrolled at the beginning and end of the year, and the numbers who graduated during the year:

- 3a. For courses available only at fixed sites (see Section One):

- ° what is the total number of sites used? _____
- ° are the sites distributed a) regionally, b) provincially, or c) do they include out-of-province sites (please specify)?

- ° what is the maximum number of sites used simultaneously for a single course?

- 5 -

- ° what is the average enrolment per site, per course?

3b. For courses which are not limited to specific sites:

- ° what are the numbers of in-province and out-of-province students?

- ° give a brief breakdown of the distribution of in-province students (e.g., Edmonton, Calgary, other urban centres, if applicable, and Southern, Central and Northern rural Alberta):

4. What was the 1991/92 operating budget for your distance education unit?

5. Please list those courses/programs which were operated on a cost-recovery basis, through either tuition revenue, grants or contracts from sources other than Alberta Advanced Education & Career Development, or combinations of these:

Course/Program	Funding source(s)

INFORMATION FORM

Name of Institution: _____ Telephone: _____
 Address: _____ Contact Person: _____

Course Title	Subject Category	Delivery Mode	Credit	Entrance Requirements

Appendix B

List of Survey Respondents

APPENDIX B - List of Survey Respondents

Post-Secondary Institutions

Universities

Athabasca University
The University of Alberta
University of Calgary

Colleges

Alberta Vocational College Lesser Slave Lake
Concordia College
Fairview College
Grant MacEwan Community College
Lakeland College
Lethbridge Community College
Olds College
St. Stephen's College

Institutes

Northern Alberta Institute of Technology (NAIT)
Southern Alberta Institute of Technology (SAIT)

Government Department

Alberta Agriculture

Private Sector Agencies

Certified General Accountants' Association
Petroleum Industry Training Service
Rural Education Development Association
Wetaskiwin General Hospital

Appendix C

Listing of Distance Education Programs and Courses

APPENDIX C - Listing of Distance Education Programs and Courses

INSTITUTION KEY & CONTACT TELEPHONE NUMBERS

Area Code (403)

AVC LSL - AVC Lesser Slave Lake (849 - 8712)
 AU - Athabasca University (675 - 6185)
 CC - Concordia College (466 - 6633)
 FC - Fairview College (835 - 6623)
 GMCC - Grant MacEwan Community College
 (441 - 4880)
 LC - Lakeland College (853 - 8563)
 LCC - Lethbridge Community College (320 - 3235)
 NAIT - Northern Alberta Institute of Technology
 (471 - 7582)
 OC - Olds College (556 - 8302)
 SSC - St. Stephen's College (439 - 7311)
 SAIT - Southern Alberta Institute of Technology
 (284 - 8852)
 UA - University of Alberta (492 - 2681)
 UC - University of Calgary (220 - 7346)

Private Sector Agencies

AA - Alberta Agriculture (Government Department)
 CGAA - Certified General Accountants' Association
 PITS - Petroleum Industry Training Service
 REDA - Rural Education Development Association
 WGH - Wetaskiwin General Hospital

NOTE: Listing of current program and course offerings is a general guideline only. Please contact institutions directly for more comprehensive information.

DELIVERY MODE KEY

A - Audio tape
 AG - Audiographics
 CMC - Computer-Mediated Communication
 CML - Computer Managed Learning
 F - Fax
 LMS - Learning Management System - Print
 T - Telephone
 TC - Teleconference
 TW - Telewriter
 V - Video
 VC - Videoconference

APPENDIX C - Listing of Distance Education Programs and Courses

Institution	Current Program & Course Offerings	Main Mode of Delivery
AU	<ul style="list-style-type: none"> • Undergraduate Degree Programs <ul style="list-style-type: none"> Administration Arts Commerce General Studies Nursing Science • University Certificates <ul style="list-style-type: none"> Accounting Advanced Accounting Administration Language Proficiency Health Development Administration Information Systems Labour Relations Labour Studies Public Administration 	P, may also include combination of audio and video cassettes and computer disks.

AVC LSL	<ul style="list-style-type: none"> • Academic Upgrading in Basic Education (10-12) Accounting 10, 20, 30 Biology 10, 20, 30 Chemistry 10, 20, 30 English 13, 23, 33, 30 Math 10, 14, 20, 24, 30, 31, 13, 23, 33 French 10, 20 Social Studies 10, 20, 30, 13, 23, 33 Science 10 • Humanities Cree Language 10, 20 	V, AG, P, TC
Concordia College	<ul style="list-style-type: none"> • Diploma of Integrated Studies in Career Development Certificate or Diploma Program (27 courses) 	A, V, P, AG P
Fairview College	<ul style="list-style-type: none"> • Academic Upgrading in Basic Education (10-12) • Building Service and Maintenance (2 courses) • Power Engineering 	P P, C P, C
GMCC	<ul style="list-style-type: none"> • Gerontological Nursing Certificate Program (9 courses) • Nurse Credentialling Program (10 courses) • Occupational Health Nursing Certificate Program (12 courses) • Nursing Basic Courses (various) • Voluntary Sector Management (17 courses) • International Business Certificate Program (14 courses) • Correctional Services Program (5 courses and 9 being developed) 	P, supplemented with A, CML, V V & TC P, CML, V P, V P, TC

Lakeland College	<ul style="list-style-type: none"> • Business Administration • Crop Production, Certificate of Achievement • Pesticide Applicator Home Study Course • Pesticide Dispenser Home Study • Food Safe Course • Math 30 	AG, T P P P AG AG
Lethbridge Community College	<ul style="list-style-type: none"> • Academic Upgrading in Basic Education (10-12) • Adult Basic Upgrading • Design (3 courses) • Visual Communications (Calligraphy - 2 courses) • Interpersonal Communications • Journalism, Credential of Academic Achievement • Early Childhood Education Certificate • Nursing Refresher • Occupational Safety courses (4 courses) • Power Engineering (2 courses) • Recreation Facility Operations and Maintenance (2 courses) • Rehabilitation Services - credits towards Rehabilitation Services Certificate, transfer program to Rehabilitation Services Practitioner Diploma • Professional Food Beverage Server • Professional Bartender 	P, A, V TC, P P, V P, V P, TC P, A, V P, TC C, P P P, C P, V, field work P P P

Olds College	<ul style="list-style-type: none"> • Diploma of Horticulture • Lawn and Garden Dispenser course • Weaving Certificate 	P, V P P
-----------------	--	----------------

SAIT	<ul style="list-style-type: none"> • Architectural and Civil Engineering Technologies <ul style="list-style-type: none"> Piping Drafting (3 courses) Blueprint Reading course Pre-employment Carpentry Program • Automotive-Diesel • Gasoline Engines Certificate Program • Business: Jr. Accounting & Accounting Technicians Certificates <ul style="list-style-type: none"> Business Law, Business Communications, Economics, Financial Accounting I, II, III, Management Accounting I, II, Organizational Behaviour, Taxation • Electrical Electronics (2 courses) • Mathematics for Trades • Health Sciences <ul style="list-style-type: none"> Certified Sterile Processing Dietary Aide Training Electrocardiography Food Service Supervision Health Record Technician program (courses) Medical Laboratory Technology (CSLT credit courses) Medical Terminology Metric and Measurements Nutrition Courses Ophthalmic Assistant Prehospital Care (EMT-A, EMR, Refresher Courses) • Library and Information Technology courses <ul style="list-style-type: none"> Library Technician Diploma (13 courses available) Rural Library Training Project (Small Library Operations Certificate) • Power Engineering Certificate Program <ul style="list-style-type: none"> Building Operation Certificate Gas Process and Field Operation Certificate Industrial Instrumentation Certificate SOLIS courses in Occupational Health & Safety, Industrial Environmental Awareness, Pressure Vessel Inspection • Petroleum Technologies - Oil & Gas Production Accounting (CAPPA) <p>(General listing of courses and programs only. Please refer to "Learning at Home" and calendar for comprehensive listing of SAIT courses/programs)</p>	<p>P P P CML/P P/TC P/TC TC P P/TC P/TC P P P P/TC P TC P P, practicum P P P P P P P P P/TC</p>
------	--	---

St. Stephen's College	• Religious Studies (6 courses)	P
UA	<ul style="list-style-type: none">• Education General, graduate and undergraduate courses (Educational Administration, Adult, Career and Technology courses, Educational Foundations, Educational Psychology, Secondary Education, Practicum• Extension Certificate in Adult and Continuing Education courses (CACE) Government Studies - Local Government Certificate Program Liberal Studies - The Bible in Modern Literature Special Sessions Agriculture Business - Managing the Modern Farm Business: Accounting Series Horticulture - Home Gardening Home Study Course Independent Study - Academic Upgrading (3 courses), General English (2 courses), Speed Reading, Business Report Writing• Nursing - Baccalaureate program• Occupational Therapy (2 graduate courses) OCCTH 521 (Program Evaluation in Occupational Therapy), OCCTH 554 (Advanced Therapeutic Procedures in Psychosocial Dysfunction)• Pharmacy (Continuing Pharmacy Education) Pharmacy in the Golden Years, Levels 1 & 2• Engineering Advanced Topics in Transportation Engineering• Division of Continuing Medical Education (Professional Development courses)• Faculte St. Jean (CUME 458, 497, PSSED 482)	TC TC P, seminar A, P Mainly face to face, some courses have TC component P P A VC, TC TC, AG P, V, TC, seminar VC VC TC TC

UC	<ul style="list-style-type: none"> • Adult and Continuing Education certificate courses (CACE) • Education - General, graduate and undergraduate courses • Continuing Medical Education • Continuing Nursing Seminars • Nurse Credentialling - Refresher Program (4 courses) • Nursing, Post RN Program • Seniors Programs • Engineering <p>Advanced Topics in Transportation Engineering</p>	<p>P, TC varies TC TC TC TC,P,V TC VC TC TC</p>
Alberta Agriculture	<ul style="list-style-type: none"> • Courses Offered cooperatively with REDA <p>Animal Health Course Cattle Nutrition Dairy Production Understanding Profit, the Business of Farming Home-Based Business, Opportunities for Farm Families Irrigation Management Pork Production Soils Course Weeds Course Beef Herd Management (Reference Binder & Study Guide) Crop Production Farm Estate Planning Farm Home Planning</p>	<p>P, V P, V P, V P P P P, V P P P, V P P, V P P</p>

<u>Private Sector</u>		
REDA	<ul style="list-style-type: none"> • Alberta Rural Development Studies Program (Cooperatively with Alberta Agriculture) 	P
CGAA	<ul style="list-style-type: none"> • Certified General Accountant, Professional Accounting Designation (17 courses). Courses include: Accounting, Auditing, Finance, Management, Taxation, Computer, Economics and Mathematics. 	CML, P & optional lectures
PITS	<ul style="list-style-type: none"> • Oilfield-related Programs (11 courses) 	P, V
WGH	<ul style="list-style-type: none"> • Medical - Clerical (Certificate from AVC) • Nursing Refresher (Brokered from GMCC) 	P, seminars P

Appendix D

Enrolment Data - 1991-92

Appendix D - Enrolment Data - 1991- 92

(Data provided is by course enrolment and is for 1991-92 unless otherwise noted)

B = Beginning of year enrolment

N = New enrolments during the year

Institution	<u>Open Entry/Exit or Self-Paced</u>	<u>Fixed Entry/Exit or Instructor-Paced</u> (Total Enrolment)
AU	8,295 (September, 1992)	N/A
AVC LSL (1992-93)	110 (B)	440
Concordia College	50 (B) 7 (N)	N/A
Fairview College	93 (B) 69 (N)	10
GMCC	263 (N) (Program Totals)	N/A
Lakeland College	610 (N)	127
Lethbridge Community College	1,033 (N)	160
NAIT	500 (B) 150 (N)	130
Olds College	195 (B) 338 (N)	N/A
SAIT	3,956 (N)	3,186
St. Stephen's College	27 (B) 39 (N)	N/A
UA	(not available)	(not available)
UC	N/A	1,013
Alberta Agriculture	2,066 (N)	N/A
REDA	169 (N)	N/A
CGAA	N/A	1,288

PITS	184 (end of year enrolment)	N/A
WGH	12 (B) 8 (N)	N/A

Appendix E

Collaborative Agreements

APPENDIX E - Collaborative Agreements

Key: Nature of Collaboration

CD - Course Development M - Marketing
 JD - Joint Delivery R - Registration
 TC - Transfer Credits T - Training
 SS - Student Support Services

Institution	Collaborative Agency	Nature of Collaboration
AU	(1) Grande Prairie, Keyano, Olds, Arctic & North Island College BC (2) Give transfer of credit for some diploma programs	(1) JD
		(2) TC
AVC LSL	(1) FC, LCC, UC, UA, SAIT, GMCC, Mount Royal (2) LC, AVC Edmonton, AVC Calgary (3) Northlands S.D, AVC Edmonton/Calgary/ Lac La Biche	(1) JD, SS, M, R
		(2) T
		(3) CD
Concordia College	(1) AU	(1) TC
Fairview College	(1) SAIT (2) PERCC - Power Engineering & Related Courses Cooperative (7 colleges which teach Power Engineering courses) (3) PERCC	(1) JD (Emergency Medical Training) (2) CD (CML Testbanks) (3) TC

GMCC	<p>(1) Ryerson Polytechnical, Vancouver Community College, Humber College, Laurentian University, Algonquin College, East Kootney College, Cabot Institute of Applied Technology</p> <p>(2) Lethbridge Community College, Lakeland College, AVC Lesser Slave Lake, Cuyahoga College, Canadore College, Red Deer College, Sinclair College (Dayton, Ohio)</p> <p>(3) AU</p> <p>(4) Alberta Social Services</p> <p>(5) Blue Quills First Nation College, Correctional Service Department of Justice, Alberta.</p> <p>(6) Colleges (LCC, Mount Royal, Red Deer, Keyano, Grande Prairie, Yukon, Arctic), Wetaskiwin & Drumheller Hospitals, Association of Nursing of PEI, Grace Hospital, PEI, University of PEI, Nursing Association of Nova Scotia, Provincial Board of Diploma School of Nursing</p> <p>(7) Numerous clinical sites for clinical practice in health science courses</p>	<p>(1) JD, TC (Voluntary Sector Management)</p> <p>(2) CD (Testbanks of English 100)</p> <p>(3) TC (International Business)</p> <p>(4) CD (Correctional Services Materials)</p> <p>(5) CD & selection of Correctional Services courses</p> <p>(6) Broker Nursing Credentialling Courses</p> <p>(7) Clinical practice</p>
Lakeland College	(1) Agriculture Colleges in Alberta, Manitoba, and Saskatchewan	(1) CD, TC
Lethbridge Community College	<p>(1) All Alberta Colleges</p> <p>(2) University of Lethbridge</p> <p>(3) Grand Prairie College</p> <p>(4) UC, UA, SAIT, AVC Calgary, Mount Royal College</p> <p>(5) College of Great Falls (Montana)</p>	<p>(1) TC (Rehab. Services Program)</p> <p>(2) TC (DES150C0)</p> <p>(3) JD (ECE260)</p> <p>(4) JD</p> <p>(5) TC, SS, R</p>

NAIT	<p>(1) Opticians' Association of Canada (2) Holland College</p> <p>(3) Daishowa Canada</p>	<p>(1) Utilizes ODP materials Canada wide (2) Utilizes Dental Assisting Independent Study materials for classroom instruction (3) Uses NAIT for Pulp & Paper Tech. - CD</p>
Olds College	<p>(1) Consortium - U of S, Olds & Assiniboine (2) Alberta Environment, Crop Protection Inst.</p> <p>(3) Hand Weavers, Spinners & Dyers of Alberta</p>	<p>(1) CD, Prairie Horticulture Certificate (2) CD, Lawn & Garden Pesticide Dispenser (3) CD, Weaving Certification</p>
SAIT	<p>(1) Canadian Association of Petroleum Production Accountants, Alberta Health Care Association (2) Society of Management Accountants of Alberta, Canadian General Accountants' Association of Alberta, Canadian Society of Laboratory Technicians</p>	<p>(1) CD, JD, TC (2) CD, TC</p>

UA	<p>(1) AU, GMCC, Red Deer Community College</p> <p>(2) Vancouver Community College, U of C</p> <p>(3) Olds College, Red Deer Community College, Keyano, AVC LSL and AVC Lac La Biche, Grande Prairie, SAIT, NAIT</p> <p>(4) Edmonton Telephones, Northern Telecom</p> <p>(5) Other provinces & American Council of Pharmacy Education</p> <p>(6) (Government Studies) U of Regina, many institutes in Alberta and across Canada (currently working with Western Canada Educational Strategy group for Municipal Administrator education - University of Regina, University of Manitoba, UBC, NWT</p> <p>(7) Certificate in Adult and Continuing Education (CACE) CACE consortium</p> <p>- Faculty of Education (U of A)</p> <p>- OC, Learning Centre (Calgary), Fraser Valley University College</p>	<p>(1) TC</p> <p>(2) JD</p> <p>(3) JD & TC</p> <p>(4) CD</p> <p>(5) not indicated</p> <p>(6) CD (U of R only) TC</p>
UC	(1) UA	(1) JD, TC
<u>Private Sector</u>		
CGAA	(1) Various Canadian Post-secondary Institutions	(1) TC & exchange of lessons notes
WGH	(1) GMCC, AVC Calgary	(1) Broker programs

Appendix F

Principle Modes of Delivery

APPENDIX F - Principle Modes of Delivery

Delivery Mode Key

A - Audio tape
 AG - Audiographics
 CMC - Computer-Mediated Communication
 CML - Computer Managed Learning
 F - Fax
 P - Print
 T - Telephone
 TC - Teleconference
 TW - Telewriter
 V - Video
 VC - Videoconference

(For Institution Key - refer to APPENDIX C)

Institution	Principal Technologies Used	Combinations Used
AVC LSL	TC, AG, A, V, T, F	Yes
AU	P, CMC, TC	Yes
Concordia College	P, T	-
Fairview College	P, CML, P, F	Yes
GMCC	P, CML, TC, A, V, (AG for one course)	Yes
Lakeland College	P, TC, AG, T	Yes

Lethbridge Community College	P, TC	-	
NAIT	P	-	
Olds College	P, V	-	
St. Stephen's College	P	-	
SAIT	P, TC, V, T, CML	Yes	
UA	P (Education, Extension, Pharmacy, Medical Laboratory Science) TC (Education, Nursing, Occupational Therapy, Extension, Pharmacy) Videoconferencing (Engineering, Nursing)	Yes	
UC	TC, TW	Yes	
<u>Private Sector</u>			
Alberta Agriculture/ REDA	P, V, CML P	Yes	
CGAA	P	-	
PITS	P	-	
WGH	P, V	-	

Appendix G

Distance Learning Development Initiatives

APPENDIX G - Distance Learning Development Initiatives

KEY: P - planned, UD - under development, ** - format to be determined

INSTITUTION AND DELIVERY MODE KEY - refer to APPENDIX C

NOTE: Listing of courses or programs planned or to be developed by institutions in the next 2 years. This listing is a general guideline only, please contact institutions directly for more comprehensive information.

Institution	Program/Course (Subject Area)	UD or P	# of courses	Mode
AVC LSL	Cree 30	all P	1	TC, TW, & P, for all
	Science 10, 20		2	
	ABE		1	
	Secretarial Arts		1	
	Philosophy		1	
	Psychology		1	
	Small Business Management		1	
AU	Master's Degree in Distance Education	UD	10	P, CMC CMC
	Master of Business Administration	UD		
Fairview College	Power Engineering (2nd class) Cooling Tower Technician	UD	6	CML, P P
		UD	1	

GMCC	Correctional Services	UD	9	P, TC, V
	Dance	UD	2	P, V
	Day Care Orientation	UD	1	P, V, TC
	Palliative Care	P	4	P, TC
	Security Science	P	4	P, CML, V
Lakeland College	Business Administration Diploma	P	6	P, TC, AG
	Adult Basic Upgrading	UD	2	AG, CAI
	University Transfer	P		VC
	Early Childhood Development	P		VC
	Rehabilitation Diploma	P		VC

Olds College	Soils (100) Prairie Horticulture Certificate Weaving Certification	UD UD UD	1 16 3	P P P
SAIT	Auto CAD Certificate Construction Management Certificate Pre-Employment Cabinet Making Auditor Training Certificate	P/UD P/UD P/UD P/UD	5 11 1	P P CML

UA	Education	P	16	TC
	Adult Career and Technology: EdAdu 345/390/460/461/485, EdMda 351, Practicum: EdPra 454/455; Educational Psychology: EdPsy 363/371; Educational Foundations: EdFdn 301; Educational Administration: EdAdm 401/502/511/512/541	P	16	TC
	EdAdu 345/460/461, EdFdn 301/410, EdAdm 401, EdMda 470, EdPsy 371/495, EdPra 454	P	10	
	Secondary Education: EdSec 200	UD	1	CML
	Phase 3 Practicum (The Visit: Videoconferencing project)	UD	1	VC
	Pharmacy (Continuing Professional Education)	UD	1	V
	Pain Management	P	2	P
	Pharmacokinetics, Pharmat			
	Nursing (graduate courses)	P	3	VC
	Engineering (undergraduate courses)	UD	6	VC
	Medical Laboratory Sciences (undergraduate courses)	P	6	P
	Extension (CACE)	P	1	P, TC

UC	Master's Degree in Education Professional Diploma in Special Education Master's Degree in Continuing Education Engineering Graduate Courses Communications	P	7 full	TC, TW, MM
		P	4 full	TC, TW, MM
		UD	**	TC, CMC, MM
		P	**	VC
		P	**	VC
Alberta Agriculture	Ratcon Formulation Software for Dairy, Sheep and Horses Feedlot Management	P	1	CML, P
		P	1	P, V
Rural Education and Development Association	Alternate Futures for Prairie Agricultural Communities	UD	1	P, A, Radio

